SEQUENCE LISTING

<110>   Baker, Brenda
         Bennett, C. Frank
         Butler, Madeline M.
         Shanahan, William R.

<120>   ANTISENSE OLIGONUCLEOTIDE MODULATION OF TUMOR NECROSIS
FACTOR-ALPHA (TNF-ALPHA) EXPRESSION

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<141>   2001-04-02

<150>   US 09/313,932
<151>   1999-05-18

<150>   US 09/166,186
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           Naylor, S.L.
           Sakaguchi, A.Y.
           Smith, D.
           Jarrett-Nedwin, J.
           Pennica, D.
           Goeddel, D.V.
           Gray, P.W.
<302>      Human lymphotoxin and tumor necrosis factor genes:
structure, homology and chromosomal localization
<303>      Nucleic Acids Res.
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<307>      1985-09-11
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Thr Thr Leu Phe Cys Leu Leu His Phe Gly Val Ile Gly Pro Gln Arg
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gtg gag ctg aga gat aac cag ctg gtg gtg cca tca gag ggc ctg tac    2286
Val Glu Leu Arg Asp Asn Gln Leu Val Val Pro Ser Glu Gly Leu Tyr
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ctc atc tac tcc cag gtc ctc ttc aag ggc caa ggc tgc ccc tcc acc    2334
Leu Ile Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys Pro Ser Thr
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cat gtg ctc ctc acc cac acc atc agc cgc atc gcc gtc tcc tac cag    2382
His Val Leu Leu Thr His Thr Ile Ser Arg Ile Ala Val Ser Tyr Gln
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acc aag gtc aac ctc ctc tct gcc atc aag agc ccc tgc cag agg gag    2430
Thr Lys Val Asn Leu Leu Ser Ala Ile Lys Ser Pro Cys Gln Arg Glu
165             170             175             180
acc cca gag ggg gct gag gcc aag ccc tgg tat gag ccc atc tat ctg    2478
Thr Pro Glu Gly Ala Glu Ala Lys Pro Trp Tyr Glu Pro Ile Tyr Leu
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gga ggg gtc ttc cag ctg gag aag ggt gac cga ctc agc gct gag atc    2526
Gly Gly Val Phe Gln Leu Glu Lys Gly Asp Arg Leu Ser Ala Glu Ile
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Asn Arg Pro Asp Tyr Leu Asp Phe Ala Glu Ser Gly Gln Val Tyr Phe
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Gly Ile Ile Ala Leu
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gagaccctac ataaacaaag cccaacagaa tattccccat cccccaggaa acaagagcct   3582

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gca ggg gcc acc acg ctc ttc tgt cta ctg aac ttc ggg gtg atc ggt   4697
Ala Gly Ala Thr Thr Leu Phe Cys Leu Leu Asn Phe Gly Val Ile Gly
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ccc caa agg gat gag gtgagtgtct gggcaaccct tattctcgct cacaagcaaa   4752
Pro Gln Arg Asp Glu
            60

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Ala Leu Leu Ala Asn Gly Met Asp Leu Lys Asp Asn Gln Leu Val Val
        115             120             125

cca gcc gat ggg ttg tac ctt gtc tac tcc cag gtt ctc ttc aag gga   5944
Pro Ala Asp Gly Leu Tyr Leu Val Tyr Ser Gln Val Leu Phe Lys Gly
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Gln Gly Cys Pro Asp Tyr Val Leu Leu Thr His Thr Val Ser Arg Phe
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Ala Ile Ser Tyr Gln Glu Lys Val Asn Leu Leu Ser Ala Val Lys Ser
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ccc tgc ccc aag gac acc cct gag ggg gct gag ctc aaa ccc tgg tat   6088
Pro Cys Pro Lys Asp Thr Pro Glu Gly Ala Glu Leu Lys Pro Trp Tyr
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